

Title (en)  
OPTO-ELECTRONIC LENGTH OR ANGLE MEASUREMENT APPARATUS

Publication  
**EP 0241642 B1 19910529 (DE)**

Application  
**EP 87100897 A 19870123**

Priority  
DE 3604215 A 19860211

Abstract (en)  
[origin: EP0241642A2] In such a measuring device, the division (T) of a scale (M) is scanned by two scanning units (AE1, AE2), which are spaced apart in the direction of measurement X, having in each case a light source (L1, L2) and in each case one photoelement (P1, P2). The two photoelements (P1, P2) supply two periodic scanning signals (S1, S2) which are additively superimposed on one another in analog form. To keep a predetermined ratio of amounts of the maximum amplitudes of the periodic scanning signals (S1, S2) constant, each light source (L1, L2) is associated with an additional photoelement (ZP1, ZP2) for generating a brightness signal (HS1, HS2) proportional to the brightness of the light source (L1, L2), which are applied to a control unit for controlling the brightnesses of the light sources (L1, L2). <IMAGE>

IPC 1-7  
**G01D 5/36**

IPC 8 full level  
**G01D 5/36** (2006.01)

CPC (source: EP)  
**G01D 5/36** (2013.01)

Citation (examination)  
DE 1548708 B1 19700212 - LICENTIA GMBH [DE]

Designated contracting state (EPC)  
AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0241642 A2 19871021; EP 0241642 A3 19881221; EP 0241642 B1 19910529**; AT E64005 T1 19910615; DE 3604215 A1 19870813; DE 3604215 C2 19920423; DE 3770315 D1 19910704; ES 2022159 B3 19911201

DOCDB simple family (application)  
**EP 87100897 A 19870123**; AT 87100897 T 19870123; DE 3604215 A 19860211; DE 3770315 T 19870123; ES 87100897 T 19870123